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ABSTRACT

A study examined the characteristics and attitudes of tutors and students involved in Project LEARN, an adult literacy program affiliated with the Interchurch Council of Greater Cleveland, Ohio. Data for the study were obtained from several sources, including a mail questionnaire administered to all 183 tutors involved in the project, a longer questionnaire administered to 148 of the tutors, pretests completed by all 181 students participating in the program, posttests completed by students after receiving 50 hours of tutoring, telephone interviews conducted with 100 students, and monthly calendars kept by students. Although unsure about the future prospects of their students becoming independent readers, the tutors seemed confident of their teaching ability. Most tutors believed that students' limited ability or learning handicaps are serious impediments to reading improvement and requested additional diagnostic information on students, more supplementary materials, and ongoing training as well as more preliminary training. Students called for more interesting and advanced materials, more convenient meeting times and places, and additional counseling assistance. Both students and tutors were highly satisfied with their experiences in Project LEARN and generally agreed that the longer students participate in the program, the greater its impact on them. (MN)

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AN EVALUATION STUDY OF PROJECT LEARN STUDENTS AND TUTORS 1982-1984

A Paper Delivered at the Annual Meeting
of the American Educational Research Association
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AN EVALUATION STUDY OF PROJECT LEARN STUDENTS AND TUTORS 1982-1984

Introduction and Evaluation Goals

During this long awaited period of increasing national attention and funding to combat adult illiteracy, it is essential for literacy programs to be able to document their effectiveness. Flowing from this spirit, a two year study (January, 1982 through December, 1983) of the characteristics of tutors and students in Project LEARN, affiliated with the Interchurch Council of Greater Cleveland, Ohio, was planned and implemented. The study, supported financially by the Bingham Foundation of Cleveland, Ohio, was intended to follow the path set by the National Affiliation for Literacy Advance (now known as Laubach Literacy Action) Study completed in 1973. The NALA Study examined selected variables of 509 tutors and the same number of students who were involved in their respective roles in learning to read or assisting in that process. Whereas the NALA study encompassed individuals from many literacy programs this study focuses exclusively on Project LEARN. Specifically, the goals of the evaluation study were:

1. To gather descriptive characteristics about the tutors and students that might help to understand them better and to improve program planning and implementation.

2. To assess the attitudes and impressions of tutors and students concerning Project LEARN---both its process and product outcomes.

3. To surface any relationships among key variables such as pre and post test scores, days and hours in the program, etc.

4. To serve as a model for adult literacy programs to examine and if judged to be useful and appropriate, to be used by others to assess their program outcomes.

Instrument Selection and Data Collection

A number of instruments and procedures were used to gather study data. In regard to tutors, a data sheet was completed at the time the tutor entered the training program. After the tutor was actively engaged in tutoring, he/she was asked to complete a mailed questionnaire. A second, more extensive, questionnaire was completed by those who indicated a willingness to do so. Each student also completed a data sheet during an intake interview. At the same time, the student took the Adult Basic Learning Examination (ABLE) pre-test.[1] Students who left the program were interviewed by telephone; those who remained in the program at the conclusion of the study also were interviewed by telephone. Furthermore, each student submitted a monthly calendar that enabled project personnel to monitor tutoring hours and lessons completed. Finally, when the student reached 50 hours of tutoring the student and his/her tutor were notified that the student must return to the Literacy Center to take the ABLE post-test. It should be noted that tutors had no role in administering or scoring the test.

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1 Adult Basic Learning Examination, Karlsen, Madden, Gardner (New York: Harcourt Brace and World, 1967).

Tutor Data

One hundred and eighty three (183) tutors, all volunteers, were included in the Project LEARN tutor sample. Over 80% of the tutors (148 out of 183) responded to the questionnaire designed to gather insights about the persons who participate as tutors in an adult literacy program, their insights about the students they tutored and their attitudes, observations and conclusions about Project LEARN.

A majority of the tutors were white (79%), female (77%), employed (59%) and college educated (52%). As regards the tutors' ages, the two largest sub-groups were persons 26-35 (29%) and those between 56-65 (24%). Almost half of the tutors were married (49%) with (34%) single. The great majority (83%) had a single student to tutor; twelve percent (12%) had two students.

Tutors first heard of Project LEARN from four sources---the newspaper(48), family member or friend(46), publicity on t-v (32), and announcements in churches(26). These four sources accounted for almost 75% of the responses. Tutoring was a twice a week activity at least for about 80% of the tutors. The typical tutor was with Project LEARN for 4-8 months.[2]

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2 Project data suggests that the average number of tutor days in the program was 391. The discrepancy between the two sets of figures is due to the difference between the recollections of the tutors who reported the time they worked at tutoring one or more students (4-8 months) and the time the project staff calculated the average tutor participated in Project LEARN activities (391 days). Understandably, project staff were hopeful that a tutor who was experiencing some problem or difficulty would be able to work it out without leaving the program. Consequently, they were likely to keep the tutor on the active list as long as possible.

Tutors reported that students regularly appeared for tutoring sessions, about 60% attended 90% or more of the scheduled sessions; another 20% attended 75% to 90% of the time; less than 10% of the students attended less than 50% of the scheduled sessions. Tutors were divided on the question as to whether their students would succeed as independent readers. About 25% (37) believed their student's chances were "excellent"; another 30%(45) rated their student's chances as "good".

However, nearly 30% (42) rated their students as only having a "fair" chance, while nearly 10% (14) saw their student as having only a "poor" chance. The tutors were more confident of their teaching ability. About 75% of the tutors rated their success in teaching students "to be independent readers" as "excellent or good" as compared to 25% who rated themselves as "fair or poor".

The tutors were asked what they believed were the reasons their students left Project LEARN. No single reason dominated their responses. The greatest number indicated "lack of motivation, discouragement(26%), followed by "employment reasons, tutor left program, family problems, health reasons, moved"--all of which accounted for from 5% to 13% of the responses. When asked for the reasons that caused them [the tutors] to terminate their association with Project LEARN, a number of reasons were given. The single most common reason was "student quit/finished" (25%) followed by " work reasons, health reasons, moved, family responsibilities, inadequate training" --- all of which elicited from 6% to 16% of the responses.

Concern then shifted to the tutors' attitudes and conclusions concerning Project LEARN as well as their suggestions for program improvement. The tutors were asked to list any problems that their students may have had that interfered with learning progress. No problem was mentioned much more than others---although grouping together "student has limited ability"(25) and "student has learning handicap"(14) accounted for 32% of the total responses. Next came "student work schedule"(17), "health problems"(15), and "transportation problems"(14). Tutors were asked whether they provided assistance to their students other than reading lessons, forty-eight (48) responded "yes" (68%), thirty twenty-three (23) responded "no"(32%). Those who did provide other assistance indicated that "listening; being a friend" was the most common assistance(44), with providing "transportation" and securing a "library card" (11) mentioned much less frequently. When asked if Project LEARN should provide assistance other than reading, thirty-five(35) answered affirmatively (55%), while twenty-nine(29) answered negatively (45%).

When the tutors were asked, "What would have been helpful to you in working with your student?", they recommended in order of preference---additional "student diagnostic information"(39), "student background information"(30), " training in teaching methods"(22), and "books"(10). When asked to recommend changes in the nature of their training as tutors, the respondents coalesced first around the need for "more in-depth, on-going support from Project LEARN"(58), followed by "more information about supplementary materials"(34), "more meetings with other

tutors"(33), "continuous training"(29)," a statement of tutor responsibilities"(23), and longer "preliminary training"(20). The tutors were asked to recommend changes in "lessons/ materials", "matching of tutor and student" and "follow-up procedures of students"and in "recruitment of tutors". In regard to "lesson materials" they recommended "more relevant stories"(30), "more reinforcement materials"(24), "materials that help special problems, i.e. hearing, sight(19), "more supplementary materials"(17), and "more variety in materials(15).

In regard to "matching of tutor and student" there were a number of recommendations---"know ability of tutor to handle learning problems"(22), "[schedule] an introductory meeting between tutor and student to get to know each other"(19), "more background on tutor and student is needed"(15),"more attention to needs of students" and "help in finding time and place for tutoring" (13). In response to "student follow-up", the tutors recommended "periodic review with tutors concerning student's progress"(37), "check up by main office to learn how students feel about the program"(33), and "clarification of tutor responsibility in this area"(18). Finally, in response to the question about changes in "methods of tutor recruitment", the respondents offered the following, "more publicity"(40), "clearer understanding of time demands"(22), "each tutor [should] recruit another"(17), while a number of respondents(16) said that "no changes were necessary".

Finally, the tutors were asked to rate their experience in the Project. A majority of those who responded (42-55%) rated their experience as "very positive", while nineteen(19-25%) rated it as "positive". Eleven (11-14%) rated the experience as "somewhat positive". Only four (4-5%) tutors viewed their experience as "somewhat negative " or "negative". Given the substantial sample (76) , it is apparent from the responses to the rating question, that the tutors were very supportive of the goals and accomplishments of Project LEARN.

Student Data

One hundred and eighty one (181) native speaking students made up the student sample. A majority of the students were black (59%), male (71%), and unemployed or laid off (70%). Only 31% were married, most had no children at home (56%). The largest group of students were under 35 years of age (57%). As to education, the majority had attended some high school (56%) while a large minority had attended or completed grade school (44%). Of this potential sample group, approximately half (100 students) responded to questions during a phone interview. Given that students entered and left the program at different times and adding the fact that adult literacy programs are entirely voluntary, the number of completed phone interviews is quite high. This number included students who left Project LEARN during the evaluation period (January, 1982-December,1983) (n=39) and those who remained in the program when the evaluation period ended (n=61). Although the groups responded differently to some questions, in general their responses were sufficiently compatible to merge them except where that would distort the

data. In such cases, the results were analyzed separately.

The students were asked "How did you first hear of Project LEARN?" Whereas the tutors responded the "newspaper" and "family member,friend", a majority of the students (51%) responded "family member,friend"(39), followed by "television"(26),and "social service agency" (10). A majority of the students reported that they were not working (66) compared to thirty-three (33) students who responded that they were working at the time of the interview. Students who indicated that they were working were asked what "kind of materials do you have to read for your work?" Fifteen (15) students responded "instructions"; seven (7) responded "blueprints". Interestingly, twelve (12) students responded "nothing". Asked for the type of reading they engaged in at home, students replied predictably. The "newspaper" was read by 35% of the students (56), followed by "magazines" (34), "books " (33) and "religious materials" (17). Almost all the students in both the continuing and the terminated groups (82) met with their tutors "2 or more times a week"; sixteen (16) met "once per week", while only one (1) reported meeting "less than once per week". The students were asked if their tutoring schedules changed from month to month; forty (40) students answered that it did "change more than once a month" while fifty-eight (58) students reported that "it did not". Those who reported that it did change more than once a month indicated that the most common reasons were either the student's own work schedule or the work schedule of the tutor. The great majority (78) of the students had worked with only one tutor;

seventeen (17) reported that they had been assigned to two tutors while only (3) had experienced three tutors. An important question in the survey asked if the students received encouragement from any relatives, friends or employer. There were no statistically significant differences in the responses between the two groups. Those who had left the Project split evenly; eighteen(18) answered "yes", and eighteen (18) answered "no". In response to the same question, twenty (20) of those still in the program answered "yes" while twenty-eight (28) answered "no". Finally, the students who were terminated were asked why they left. The only reason that received double-digit responses was "work schedule".

A series of questions explored issues of tutor commitment and competency as seen through the eyes of the student. The students (90%) reported that their tutors were organized " most of the time" (the most positive response). The tutors generally brought "reading materials or games" to the students but were less likely to provide assistance other than reading to the students. (thirty-nine (39)"did", fifty (50) "did not") However, it should be noted that the tutors responded to this question somewhat differently. They indicated that they brought the counsel of "friendship". Probably, the difference is due to the difference in perception of what was being asked rather than a true difference in the way the two groups evaluated the tutors' responsiveness. As to "pace", ninety-three (93) students were comfortable with how "fast the lessons were covered"; only nine (9) students responded that some of the time they were uncomfortable with the speed of the lessons. Finally, over 90%

of the tutors told students "that the lessons were going well".

The final series of questions were directed to the central issue of the evaluation, that being, student perceptions about Project LEARN and its effects on the student's reading competency and commitment to further growth. The students were asked to rate the interest level of the Project LEARN books. Fifty-nine (59) students answered "very interesting"; twenty-nine (29) students answered "interesting"; only nine (9) students answered "uninteresting" or "very uninteresting". When asked if they "learned something new each lesson", seventy-four (74) said "most of the time", fourteen (14) said "some of the time"; only four (4) answered "rarely". Project LEARN students reported that they did "outside reading" while studying their lessons. Sixty-five to seventy-five percent of the students indicated that they did "a lot or some" outside reading. As a result of the lessons and the outside reading, sixty percent (60%) of those who remained in the program at the time of the interview believed that they had "improved their reading through participation in Project LEARN by "a lot". Thirty-three percent (33%) responded that they improved "some". Only six (6) percent reported "a little"; no one reported "not at all". Thirty-nine percent (39%) of the terminated group answered that they improved "a lot", while thirty-six percent (36%) improved "some", sixteen percent (16%) answered "a little"; only eight (8%) answered "not at all". It is clear from the previous analysis that students who remained in the program longer perceived that they gained greater competency in reading from participating in the program compared

to those who spent less time in the program.

When asked how their improvement in reading helped them in their daily lives, forty-five percent (45%) of the students responded that it helped their "self-confidence"(71),"at work" (22), "shopping"(20),"encouraged other reading"(17)and "family life"(11). Of those who were terminated, twenty-one students (21) responded that they had "continued personal reading", one (1) student had "continued schooling". Only six (6) students had "done nothing" further to continue their reading activities. A final question sums up the judgements of the students about Project LEARN. When asked what they would say about the Project to "someone who needed help with reading", eighty-six (86) students would inform that person that Project LEARN would be "very helpful". Ten (10) students would say that the Project was "helpful". No one responded with any less positive judgement.

Finally, two questions asked the students to recommend changes and suggestions for program improvement. The list of their specific suggestions appear below in rank order:

1. More interesting materials (31)
2. More advanced materials (18)
3. More convenient meeting place and time (13)
4. More counseling help (10)
5. Better matching of tutor and student (8)
6. Other educational help (7)
7. Help with personal and social problems (5)

Analysis of Coded Tutor and Student Variables

I. Analysis of Tutor Variables

The following variables were included in the tutor sample.(n=183)

1. Tutor number(TUTNUM)
2. Race(RACE) ("1"Black, "2"White","3"Other)
3. Age(AGE)("1"25 or under,"2"26-35,"3"36-45,
"4"46-55","5"56-65,"6"over 65)
4. Sex(SEX) ("1"M,"2"F)
5. Educational Level(EDUC) ("1" less than high school,"2"GED,"3"H.S.,
"4"some college,"5"college,"6"post-coll)
6. Marital Status(MS) ("1"married,"2"single,"3"divorced,"4"widowed)
7. Number of Children at Home(CHILDHME) (actual number)
8. Employment Status(EMP) ("1"yes,"2"no)
9. Type of Transportation Used (TRANS) ("1"car,"2"bus,"3"both,"4"walk)
10. Number of Days in the Program(DAYSIN)
11. Number of Students Tutored(NUMSTUD)

Although selected variables were discussed in the previous section of this report, cross-tabulation and multiple regression analysis were used comparing Variable 10 (DAYS IN the Program) against other variables of interest for the purpose of identifying any interesting relationships between and among the variables. The results showed that there were only two statistically significant relationships between "Number of DAYS IN the Program" and the other variables. Tutors who were "married" or "widowed" were more likely to remain in Project LEARN more days than were tutors who were "single" or "divorced". ($p=.01$) Second, "older" tutors were more likely to remain in the program than were "younger" tutors. ($p=.01$) There also were some tendencies that approached statistical significance and thus deserve mention, "Whites" tended to stay longer than "blacks"(on average 400 days compared to 293 days) . In regard to educational level only those tutors who had "post-graduate status" appeared to stay in the program longer than did tutors in any other educational level category (Post-graduate tutors stayed 580 days).

II. Analysis of Student Variables

The following variables were included in the student sample. (n=181) As with the tutors, a number of the variables were discussed in the previous section of this report.

1. Student Number(STUDNUM)
2. Race(RACE) ("1"Black,"2"White,"3"Other)
3. Age(AGE) "1"25 and under,"2"26-35,"3"36-45,"4"46-55,"5"56-65, "6"over 65)
4. Sex(SEX) ("1"Male,"2"Female)
5. Employment Status(EMP)("1"yes,"2"no,"3"laid-off)
6. Whether Student Can Purchase His/Her Own Books(CANPURCH) ("1"yes,"2"no)
7. Educational Level(EDUC) ("1"none,"2"Grades1-4,"3"5-6,"4"7-8, "5"9-10,"6"11-12)
8. Whether Student Had Been in Special Education(SPECED) ("1"yes, "2"no)
9. Marital Status(MS) ("1"married,"2"single,"3"div/sep,"4"widowed)
10. Number of Lessons Completed(NUMLESS)
11. Whether Student Had Attended Any Other Reading Program(OTHRPROG) ("1"yes,"2"no)
12. Number of Children(NUMCHILD)
13. Address Identified As Zip Code Location(ZIP)
14. Number of Days In Program(DAYSIN)
15. Number of Hours in Program(HOURSIN)
16. Pre-test Score on Adult Basic Learning Examination (ABLE)(PRETEST)
17. Post-test Score After 50 Hours of Tutoring(POSTTEST)
18. Hours Beyond 50(OVER50HR) (actual number)
19. Second Post-test Score After 100 Hours of Tutoring(2NDPOSTT)
20. Number of Tutors(NUMTUT)
21. Whether Student Studied in Older or Newer Version of Skill Book(SKILLBOO) ("1"older version, "2"newer version) 3

The variables of greatest interest were # 17, 10, 14, 15, or POSTTEST, NUMBER OF LESSONS, DAYSIN AND HOURSIN. They were used in a number of different analyses. The following summary reports the key relationships among the variables of most interest beginning with POSTTEST.

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3 Students who entered the program in 1982 studied the New Streamlined English Series. Those who entered in 1983 studied The Laubach Way to Reading., a revision of the New Streamlined English series.

The POSTTEST was compared using "Analysis of Variance" (ANOVA) against the PRETEST to determine if students increased their ABLE scores during the 50 or so hours between pre and post-testing. It is reasonable to assume that the difference between the pre and posttest scores can be attributed to program impact.

SAMPLE SIZE	PRETEST	POSTTEST	F TEST	LEVEL OF SIGNIFICANCE
53	17.17	29.26	16.37	.001

TABLE 1 ONE WAY ANALYSIS OF VARIANCE BETWEEN PRETEST AND POSTTEST SCORES ON THE ABLE TEST.

Using "matched pairs" the average score on the pre-test was 17.17, while the average on the posttest was 29.26.(Table 1) The difference was statistically significant at .001. In terms of grade equivalent analysis, the increase amounts to about a whole grade level, thus supporting the inference of strong program effects. Unfortunately, only 53 students were post-tested, while 176 took the pretest. That fact reduces the inferences one can make in later analyses. For example, the POSTTEST was administered at or about 50 hours of tutoring. A SECOND POSTTEST was administered at or about 100 hours of tutoring.

The average score of these "matched pairs" on the POSTTEST was 24.40; the SECOND POSTTEST score was 30.40, about one half of a grade equivalent improvement. This difference typically would be statistically significant. However, only 10 students took the posttest a second time.[4] Consequently, the results were not significant at the .05 level. However, since students who completed 53 hours of tutoring , on average, increased their reading capability an entire grade level, and the few students who were tested at 100 hours continued their reading progress it is fair to assume that the longer one remains active in Project LEARN, the greater can be the expected reading improvement. Incidentally, those who did remain longer than 50 hours remained on average a total of 143 total hours.

The POSTTEST was compared using regression analysis to determine the relationships between the posttest, the number of days and hours in the program and the number of lessons completed. On average, a student can be expected to remain in the program 267 days, be tutored for 51 hours and complete 30 lessons. The POSTTEST (taken by those who remained in the program at least 50 hours) correlated most highly with the "number of lessons" completed and was not particularly related to the "number of hours tutored or days in the program". Thus, the POSTTEST score can be predicted more accurately by knowing the

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4 It is appropriate to explain that students who entered during the final six months of the study could not be expected to accumulate 50 hours of tutoring. Furthermore, those students who entered in 1984 could not be expected to accumulate 100 hours. In sum, the discrepancy between pre and posttest numbers is explained, in part, by the understandably long treatment period.

number of lessons completed rather than the number of hours of tutoring or days in the program. The statistical analysis of the relationships among POSTTEST, PRETEST and NUMLESS is shown in Table 2.

NUMBER OF STUDENTS	NUMBER OF LESSONS COMPLETED	ABLE PRETEST	ABLE POSTTEST
29	0-50	14.97 (1.1)*	25.29 (1.9)*
21	51-100	20.69 (1.5)*	30.87 (2.8)*

TABLE 2 RELATIONSHIPS AMONG THE NUMBER OF LESSONS COMPLETED AND THE ABLE PRETEST AND POSTTEST

* Grade Equivalents

Thus, students who completed 0-50 lessons scored, on average, between one half and one grade level higher on the posttest than they had on the pretest. Students who completed from 51-100 lessons scored 1.3 grade levels higher on the posttest than they had on the pretest. Furthermore, the raw score changes in all cases are statistically significant (.01). However, it must be noted that much more student data is necessary before a definitive relationship between number of lessons completed and reading improvement can be established.

Other variables RACE, AGE, SEX, EMP, CANPURCH,EDUC,SPECED, MS,OTHPROG, NUMCHILD,NUMTUT AND SKILLBOO were compared to POSTTEST to search for further relationships. Using cross-tabulation and regression analysis, only one variable, CANPURCH showed a statistically significant relationship(.05) to POSTTEST. Students who "could purchase their own books" were more likely to score higher on the posttest than those who could not.[5]

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5 CANPURCH may be a "stalking horse" for some other variable, notably socio-economic status, or it may represent some unexamined motivational factor such as "commitment to change" or "employment, personal or family strength/stability".

There also was a tendency, although only approaching statistical significance for "whites" to score higher than "blacks" on the posttest. No other variable even approached statistical significance when used in a comparison with POSTTEST.

Additional analyses were made using DAYSIN, HOURSIN, and NUMLESS as dependent variables and the other variables as predictor variables. In regard to DAYSIN, only CANPURCH, OTHRPROG and NUMTUT were statistically significant predictors(.05,.05, .05..espectively) of DAYSIN. That is, "students who purchased their own books", "who were in a previous literacy program" or had "more than one tutor" remained in the program more days than did other students. As with POSTTEST, "whites" tended to remain in more days than did "blacks". although the differences only approached statistical significance. There also was a tendency for students with "more than one tutor" to remain in the program for more days than did students who had only one tutor.

In regard to HOURSIN, only RACE, CANPURCH and were statistically significant predictors of the "number of hours of tutoring". That is, "whites" were tutored more hours than were "blacks" and "those who purchased their own books had more hours of tutoring than those who did not. Students who "were in a former literacy program" had more hours of tutoring than those who did not although the differences only approached statistical significance.

In regard to the "number of lessons completed" (NUMLESS), RACE, and CAMPURCH were statistically significant predictors of "the number of lessons completed" (.001 and .05) respectively. No other variable approached statistical significance.

Finally, to further examine RACE as a variable, the relationship between it and PRETEST and POSTTEST on the ABLE as well as the number of lessons completed (NUMLESS) was examined. The mean pretest score of black students was 13.46 (n=102); the mean pretest score of white students was 16.11 (n=63) (See Table 3). An interesting outcome was revealed. The pre to post gain of white students was 15 points (one and a half grade levels) as compared to 9 points (.70 of a grade level) for black students. Moreover, the average pretest score of the black students who persevered to accumulate 50 hours of tutoring and thus to take the posttest was 4 points higher than was the score of the group of blacks as a whole. This difference was not present between the group of white students who took the posttest as compared to the white students as a whole.

	BLACK STUDENTS	WHITE STUDENTS
PRETEST MEAN SCORE (ALL)	13.00 (N=102)	16.11 (N=63)
PRETEST MEAN SCORE (ONLY THOSE STUDENTS POST-TESTED)	16.96 (N=27)	16.33 (N=24)
POSTTEST	26.00 (N=27)	31.83 (N=24)

TABLE 3. PRETEST AND POSTTEST DIFFERENCES BETWEEN WHITE AND BLACK STUDENTS ON THE ABLE

Although additional analysis is certainly warranted, it appears that the black students who persevered to be post-tested began their activity with Project LEARN with slightly higher reading capability as assessed by the ABLE than did their black counterparts who did not take the posttest. They scored significantly higher after 50 hours of tutoring. However, the white students who took the posttest scored no higher on the pretest than did their white counterparts who did not take the posttest. After 50 hours of tutoring they doubled their ABLE score (32 as compared to 16). Thus, white students who were post-tested began their activity in the project with comparable scores to their black counterparts and after 50 hours of tutoring for both groups, scored on average six points higher than did their black counterparts (32 to 26), a difference between the groups of between a half and a whole grade level.

What factor accounts for the differential performance of black and white students in Project LEARN? The answer lies at least in part in the number of lessons completed. White students on average completed 37 lessons; white students who persevered and took the posttest completed an average of 56 lessons. Black students completed 24 lessons; black students who took the posttest completed an average of 44 lessons. Such a substantial discrepancy between the groups would explain the difference in ABLE posttest performance since lessons completed clearly relates to growth in reading capability. Why did whites persevere longer in respect to the number of lessons completed? Interestingly, in contrast to the total group of black students who stayed in the

program for fewer days than did their counterpart white students, the blacks who persevered to take the post-test, were in the program on average seventeen (17) days longer than did whites who took the posttest. Yet, they had on average 2.3 fewer hours of tutoring. Possibly, the combination of a longer period in the program with fewer hours of tutoring may have resulted in a greater need for review work and thus fewer lessons covered.

Findings

1. Tutors are likely to hear first about Project LEARN from the newspaper, a family member or friend, t-v or from announcements in church. Students are likely to hear first from family members or friends, t-v, or social service agencies.

2. Students attend tutoring sessions on a regular basis.

3. Although unsure about the future prospects of their students becoming "independent readers", the tutors are quite confident of their teaching ability.

4. A majority of the tutors believe that the primary reason why students leave Project LEARN is "lack of motivation, discouragement". Students reported that they left for a variety of reasons, none of which received double-digit responese.

5. Tutors reported that they left Project LEARN primarily because their student "left or finished".

6. Tutors believe that students' "limited ability or learning handicaps" are serious impediments to reading improvement. (As reported by the students' themselves and included in their descriptive data summaries, 25% of the students who responded to the question said that they had been in "special classes" in school).

7. Tutors recommended "additional diagnostic information" on students, "training in teaching methods", more "books", "more project support ", "more supplementary materials", "more meetings with other tutors", "a statement of tutor responsibilities", "ongoing training as well as more preliminary training, more "relevant stories", "more reinforcement materials", "more variety in materials and materials that help special problems", "an introductory meeting between tutor and student" as well as "help in finding a suitable time and place for tutoring" and "more assistance and direction in follow-up".

8. Students recommended , among others "more interesting and advanced materials", "more convenient meeting time and place" and "additional counseling assistance".

9. Both tutors and students were highly satisfied with their experiences at Project LEARN. Tutors rated their experience as "positive or very positive".Students believed the "materials were interesting" and they "improved their reading ability as a result of project activity. They were willing to share their positive judgements with friends and acquaintances who asked for their advice and counsel.

10. Students who remained in Project LEARN for a longer duration expressed greater satisfaction with their reading capabilities and appeared to apply them to independent reading tasks more readily as compared to students who remained in the program relatively less time.

11. In regard to the tutor variables, "married and widowed" tutors remained active in Project LEARN longer than did "single or divorced" tutors, likewise "older" as compared to "younger" tutors. "White" tutors stayed longer than "black" tutors; tutors with "post-graduate degrees" stayed longer than did tutors at any other educational level.

12. In regard to student variables, students who were post-tested scored 10 points higher than they had on the pretest. The difference was statistically significant at the .01 level and translated to an increase of one full grade level, thus indicating strong program impact. Too few students took the second post-test to warrnat any conclusions concerning program effects between 50 and 100 hours of tutoring.

13. As to predictive variables "race" and "capability to purchase own books" were clearly important. Whether a student "was in a former literacy program" also helped predict hours and days in Project LEARN.

14. Black students who were post-tested scored as well on the ABLE pretest as did counterpart whites; whites scored six points higher on the post-test compared to blacks. Furthermore, whites who were post-tested completed substantially more lessons than did blacks.

15. A strong, although imprecise, relationship was discovered between the "number of lessons completed" and enhanced performance on the ABLE test measuring reading capability.

16. Black students who took the post-test were in the program for seventeen (17) days longer than were whites who took the post-test. Yet, they had on average 2.3 fewer hours of tutoring.

Recommendations

1. Project LEARN staff should consider utilizing the ABLE test as a integral component of project activity. The 10 point difference between pretest and posttest scores after 50 hours of tutoring translates into an increase of a full grade level, a fact that communicates educational as well as statistical significance.

2. The conclusion that "participation in Project LEARN enhances reading capability and the longer a student participates the greater is the predictable impact"is clearly supported by the evaluation study and should be emphasized in promotional information describing Project LEARN.

3. Although the best estimate of when to administer the ABLE posttest remains "after 50 and 100 hours of tutoring", ultimately a better indicator may prove to be "number of lessons completed". Unfortunately, at present too few students have taken the posttest to establish the necessary precision among the variables. At least 300 students should be included in the sample group. Consequently, a substantial increase in the scope of the evaluation study is necessary. What may be required is the establishment of a Laubach Literacy consortium comprising projects, each of which agrees to replicate the evaluation design. Thus, each project would administer the ABLE pretest and then the posttest after 50 and 100 hours of tutoring while maintaining a record of lessons completed for each student. A central office would be responsible for analyzing and compiling the data submitted by each participating project.

4. The tutor and student data surfaces a number of comforting characteristics about the achievements of Project LEARN. Both tutors and students are very satisfied with what they have experienced while they were project participants. A number of appropriate observations can be gleaned from the mass of data for the purposes of funding enhancement. There also are a few disquieting observations that can be found in the data and these can be used to trigger a process of project improvement, resulting in even greater project excellence. Project staff might wish to further analyze the pretest/posttest results, possibly attempting to identify factors under the control of the project that could be changed to alter the black/white student performance differential. Although black students were successful in increasing their reading capability it is clear that white students completed more lessons and advanced farther toward independent reading than did black students.